

IN THE CLAIMS

Please delete claims 1-17.

Please add the following new claims:

18. (New) A computer program product comprising:

a computer usable medium having computer program code embodied therein to process basic input output system (BIOS) modules of a computer, said computer having a central processing unit (CPU), a system memory and a nonvolatile storage device, the computer usable medium having:

computer readable program code for storing a predetermined amount of BIOS initialization code in a first portion of the nonvolatile storage device;

computer readable program code for storing a dispatch manager in a second portion of the nonvolatile storage device that is operative to selectively load and iteratively execute a predetermined number of tasks relating to initialization of the computer;

computer readable program code for executing the predetermined amount of BIOS initialization code to initialize the CPU and the system memory;

computer readable program code for copying the dispatch manager from the nonvolatile storage device to the system memory; and

computer readable program code for executing the dispatch manager to execute the predetermined number of tasks to initialize the computer.

19. (New) The computer program product recited in Claim 18 wherein the computer further comprises a secondary nonvolatile storage device, and wherein the computer usable medium further comprises:

computer readable program code for storing a plurality of BIOS modules in a protected area of the secondary nonvolatile storage device that are operative to control operation of the computer; and

computer readable program code for executing the dispatch manager to sequentially copy selected BIOS modules from said protected area of the secondary nonvolatile storage device to the system memory, and execute the selected BIOS modules in the system memory.

20. (New) The method recited in Claim 18 wherein the computer readable program code for executing the dispatch manager comprises computer readable program code for:

- (a) determining one or more BIOS modules that are required for operation of the computer;
- (b) determining if a required BIOS module is stored in the system memory;
- (c) executing the required BIOS module if the required BIOS module is in memory;
- (d) copying the required BIOS module from the secondary nonvolatile storage device to the system memory if the required BIOS module is not in memory, and executing the required BIOS module after said copying; and

(e) repeating (b) – (d) until said one or more BIOS modules have been executed.

21. (New) The computer program product of Claim 19 wherein the computer readable program code for executing the dispatch manager comprises computer readable program code for:

(a) determining one or more BIOS modules that are required for operation of the computer;

(b) determining if a required BIOS module is stored on the secondary nonvolatile storage device;

(c) copying the required BIOS module from the secondary nonvolatile storage device to the system memory;

(d) executing the required BIOS module after said copying; and

(e) repeating (b)-(d) until said one or more BIOS modules have been copied from the secondary nonvolatile storage device to the system memory and executed.

22. (New) The computer program product of Claim 19 wherein the secondary nonvolatile storage device comprises a hard disk drive.

23. (New) The computer program product of Claim 22 wherein the hard disk drive comprises a vendor protected area, a user area and said protected area.

24. (New) The computer program product of Claim 19 wherein the protected area comprises a formatted area created using Protected Area Run-Time Interface Extensions Services (PARTIES) technology.

25. (New) The computer program product of Claim 19 wherein the secondary nonvolatile storage device comprises a compact disk ROM.

26. (New) The computer program product of Claim 19 wherein the secondary nonvolatile storage device comprises a flash memory.

27. (New) The computer program product of Claim 19 wherein the secondary nonvolatile storage device comprises a floppy disk drive.

28. (New) The computer program product of Claim 19 wherein the secondary nonvolatile storage device comprises a Zip drive.

29. (New) The computer program product of Claim 19 wherein the secondary nonvolatile storage device comprises a SuperDisk drive.

30. (New) The computer program product of Claim 18 wherein the computer usable medium further includes computer readable program code for launching an operating

system of the computer after said one or more BIOS modules are copied to the system memory and executed.

31. (New) A system for processing basic input output system (BIOS) modules comprising:

a processor;

a nonvolatile storage device coupled to the processor; and

a memory coupled to the processor, said memory containing instruction sequences which, when executed by the processor, cause the processor to:

store a predetermined amount of BIOS initialization code in a first portion of the nonvolatile storage device that is operative to initialize the processor and a system memory,

store a dispatch manager in a second portion of the nonvolatile storage device that is operative to selectively load and iteratively execute a predetermined number of tasks relating to complete initialization,

execute the predetermined amount of BIOS initialization code to initialize the processor and the system memory,

copy the dispatch manager from the nonvolatile storage device to the system memory, and

execute the dispatch manager to execute said predetermined number of tasks.

32. (New) The system of Claim 31 wherein the system further comprises a secondary nonvolatile storage device, and wherein the memory further includes instruction sequences that, when executed, cause the processor to:

store a plurality of BIOS modules in a protected area of the secondary nonvolatile storage device that are operative to control operation of the system; and

execute the dispatch manager to sequentially copy selected BIOS modules of said plurality of BIOS modules from the protected area of the secondary nonvolatile storage device to the system memory, and execute the selected BIOS modules in the system memory.

33. (New) The system of Claim 31 wherein the said instruction sequences to cause the processor to execute the dispatch manager includes instruction sequences to cause the processor to:

- (a) determine one or more BIOS modules that are required for operation of the system;
- (b) determine if a required BIOS module is stored in the system memory;
- (c) execute the required BIOS module if the required BIOS module is in memory;
- (d) copy the required BIOS module from the secondary nonvolatile storage device to the system memory if the required BIOS module is not in memory, and thereafter execute the required BIOS module; and
- (e) repeat (b) through (d) until all required BIOS modules are executed.

34. (New) The system of Claim 32 wherein the said instruction sequences to cause the processor to execute the dispatch manager includes instruction sequences to cause the processor to:

- (a) determine one or more BIOS modules that are required for operation of the system;
- (b) determine if a required BIOS module is stored on the secondary nonvolatile storage device;
- (c) copy the required BIOS module from the secondary nonvolatile storage device to the system memory;
- (d) execute the copied BIOS module; and
- (e) repeat (b) through (d) until said one or more required BIOS modules are copied from the secondary nonvolatile storage device to the system memory and executed.

35. (New) The system of Claim 32 wherein the secondary nonvolatile storage device comprises a hard disk drive.

36. (New) The system of Claim 35 wherein the hard disk drive comprises a vendor protected area, a user area and the protected area.

37. (New) The system of Claim 32 wherein said protected area comprises a formatted area created using Protected Area Run-Time Interface Extensions Services (PARTIES) technology.

38. (New) The system of Claim 32 wherein the secondary nonvolatile storage device comprises a compact disk ROM.

39. (New) The system of Claim 32 wherein the secondary nonvolatile storage device comprises a flash memory.

40. (New) The system of Claim 32 wherein the secondary nonvolatile storage device comprises a floppy disk drive.

41. (New) The system of Claim 32 wherein the secondary nonvolatile storage device comprises a Zip drive.

42. (New) The system of Claim 32 wherein the secondary nonvolatile storage device comprises a SuperDisk drive.

43. (New) The system of Claim 31, wherein said memory further includes instruction sequences to cause the processor to launch an operating system after said one or more required BIOS modules are copied to the system memory and executed.

44. (New) A method for processing basic input output system (BIOS) modules of a computer having a processor, a system memory, a nonvolatile storage device and secondary nonvolatile storage device, the method comprising:

storing a predetermined amount of BIOS initialization code in a first portion of the nonvolatile storage device;

storing a dispatch manager in a second portion of the nonvolatile storage device;

storing a BIOS module in a protected area of the secondary nonvolatile storage device, wherein said protected area is accessible only by system firmware of said computer;

executing a predetermined amount of BIOS initialization code to initialize the processor and the system memory;

copying the dispatch manager from the nonvolatile storage device to the system memory;

executing the dispatch manager to copy the BIOS module from the protected area of the secondary nonvolatile storage device to the system memory, and execute said BIOS module in the system memory.

45. (New) The method recited in Claim 44, wherein executing the dispatch manager comprises:

- (a) determining one or more BIOS modules that are required for operation of the computer;
- (b) determining if a required BIOS module of said one or more BIOS modules is stored in the system memory;
- (c) executing the required BIOS module if the required BIOS module is in said system memory;
- (d) copying, when the required BIOS module is not in system memory, the required BIOS module from the secondary nonvolatile storage device to the system memory, and executing the required BIOS module after said copying; and
- (e) repeating (b) through (d) until all required BIOS modules are executed.

46. (New) The method of Claim 44 wherein executing the dispatch manager comprises:

- (a) determining one or more BIOS modules that are required for operation of the computer;
- (b) determining if a required BIOS module of the one or more BIOS modules is stored on the secondary nonvolatile storage device;
- (c) copying the required BIOS module from the secondary nonvolatile storage device to the system memory;
- (d) executing the required BIOS module after said copying; and

(e) repeating (b) through (d) until said one or more BIOS modules have been copied from the secondary nonvolatile storage device to the system memory and executed.

47. (New) The method of Claim 44 wherein the secondary nonvolatile storage device comprises a hard disk drive.

48. (New) The method of Claim 47 wherein the hard disk drive comprises a vendor protected area, a user area and the protected area.

49. (New) The method of Claim 44 wherein the protected area comprises a formatted area based on an industry standard specification.

50. (New) The method of Claim 44 wherein the secondary nonvolatile storage device comprises a compact disk ROM.

51. (New) The method of Claim 44 wherein the secondary nonvolatile storage device comprises a flash memory.

52. (New) The method of Claim 44 wherein the secondary nonvolatile storage device comprises a floppy disk drive.

53. (New) The method of Claim 44 wherein the secondary nonvolatile storage device comprises a Zip drive.

54. (New) The method of Claim 44 wherein the secondary nonvolatile storage device comprises a SuperDisk drive.

55. (New) The method of Claim 44 further comprising launching an operating system of the computer after said one or more BIOS modules have been copied to the system memory and executed.

56. (New) A system for processing basic input output system (BIOS) modules comprising:

a processor;
a nonvolatile storage device coupled to the processor; and
a memory coupled to the processor, said memory containing instruction sequences which, when executed by the processor, cause the processor to:

store a predetermined amount of BIOS initialization code in a first portion of the nonvolatile storage device,

store a dispatch manager in a second portion of the nonvolatile storage device,

store a BIOS module in a protected area of the secondary nonvolatile storage device, wherein said protected area is accessible only by system firmware,

execute the predetermined amount of BIOS initialization code to initialize the processor and the system memory,

copy the dispatch manager from the nonvolatile storage device to the system memory, and

execute the dispatch manager to copy the BIOS module from the protected area of the secondary nonvolatile storage device to the system memory, and execute said BIOS module in the system memory.

57. (New) The system of Claim 56 wherein the said instruction sequences to cause the processor to execute the dispatch manager includes instruction sequences to cause the processor to:

- (a) determine one or more BIOS modules that are required for operation of the system;
- (b) determine if a required BIOS module of said one or more BIOS modules is stored in the system memory;
- (c) execute the required BIOS module if the required BIOS module is in memory;
- (d) copy the required BIOS module from the secondary nonvolatile storage device to the system memory if the required BIOS module is not in memory, and thereafter execute the required BIOS module; and
- (e) repeat (b) through (d) until all required BIOS modules are copied and executed.

58. (New) The system of Claim 56 wherein the said instruction sequences to cause the processor to execute the dispatch manager includes instruction sequences to cause the processor to,

- (a) determine one or more BIOS modules that are required for operation of the system;
- (b) determine if a required BIOS module of said one or more BIOS modules is stored on the secondary nonvolatile storage device;
- (c) copy the required BIOS module from the secondary nonvolatile storage device to the system memory;
- (d) execute the copied BIOS module; and
- (e) repeat (b) through (d) until said one or more required BIOS modules are copied from the secondary nonvolatile storage device to the system memory and executed.

59. (New) The system of Claim 56 wherein the secondary nonvolatile storage device comprises a hard disk drive.

60. (New) The system of Claim 59 wherein the hard disk drive comprises a vendor protected area, a user area and the protected area.

61. (New) The system of Claim 56 wherein said protected area comprises a formatted area created based on an industry standard specification.

62. (New) The system of Claim 56 wherein the secondary nonvolatile storage device comprises a compact disk ROM.

63. (New) The system of Claim 56 wherein the secondary nonvolatile storage device comprises a flash memory.

64. (New) The system of Claim 56 wherein the secondary nonvolatile storage device comprises a floppy disk drive.

65. (New) The system of Claim 56 wherein the secondary nonvolatile storage device comprises a Zip drive.

66. (New) The system of Claim 56 wherein the secondary nonvolatile storage device comprises a SuperDisk drive.

67. (New) The system of Claim 56, wherein said memory further includes instruction sequences to cause the processor to launch an operating system after all required BIOS modules are copied to the system memory and executed.